



Welcome to the inaugural issue of the *Maintenance Storm Water Pollution Prevention Bulletin*. This bulletin is published monthly by the Storm Water Compliance Review Task Force (Task Force) to support the Caltrans maintenance staff in its efforts to achieve and maintain compliance with storm water pollution prevention regulatory requirements. Topics include technical information regarding practices and solutions, Task Force activities and findings, sources of additional information, and examples of effective practices encountered during statewide inspections.

Why All the Fuss About Storm Water?

The primary storm water regulatory requirements of concern are related to the National Pollutant Discharge Elimination System (NPDES). The NPDES, a program under the Federal Clean Water Act, regulates storm water runoff from storm water drainage systems, construction sites and industrial activities.

Caltrans maintenance activity is subject to NPDES regulations because Caltrans right of way and maintenance facilities are served by municipal storm drainage systems. In performing normal daily activities, the maintenance staff has the potential to introduce numerous pollutants to the municipal storm drainage systems that ultimately discharge to streams, lakes and the ocean.

What? Me Pollute?

Some maintenance facility-related pollutants are obvious—pesticides, metals and chemicals, to name a few. Other pollutants are not so obvious, yet are potentially as detrimental to the environment if unchecked. The most common sources of pollution that may be associated with Caltrans maintenance activities are:

Petroleum Products: Gasoline, diesel fuel, motor oil, lubricants, and asphaltic materials can be toxic to human and aquatic life. A single quart of motor oil improperly disposed of, could pollute 25,000 gallons of drinking water.

Sediments: Excessive sedimentation causes water quality problems and degrades the habitat of aquatic organisms and fish. Sedimentation can fill in gravel beds that are used by trout, salmon and steelhead for breeding. This will affect the food chain in following years.

Trash and Debris: Paper, Styrofoam, plastic, aluminum cans, etc., transported by wind and storm water, can impact water quality and clog storm drainage systems.

Metals: Dissolved metals and metal particulates attached to sediment, such as lead, can be transported to receiving waters by storm runoff. Heavy metals can impair development or kill sensitive aquatic species, and can accumulate in other species, to be passed up the food chain to our tables.

pH: Acid from lead batteries, concrete rinse water, and saw cut slurry can alter the pH (acidity or alkalinity) in receiving waters.

Nutrients: Nitrogen and phosphorus from fertilizers, decaying vegetation and other sources, contribute to algal “blooms” (excessive algae growth) that deplete oxygen for fish and other aquatic life.

Organic Compounds: In addition to the petroleum products already mentioned, solvents (paint thinners, degreasers and parts cleaning fluids), certain paints, deicing chemicals, and crack and joint repair products can pollute storm water runoff.

Other Pollutants: Other common maintenance facility-related pollutants include pesticides, synthetic detergents (used for cleaning vehicles and equipment), and epoxy resins in bonding and adhesive materials—any of which can contaminate storm water.

1998 Compliance Inspections

Compliance inspections are a critical component of the Caltrans Storm Water Pollution Prevention Program process of continuous improvement and self-monitoring. The Task Force will conduct inspections of Caltrans maintenance facilities between February and June, 1998. During these visits, the Task Force will provide on-the-job training to maintenance personnel involved in the inspection process, evaluate maintenance facility compliance with storm water pollution prevention requirements, and gather information about the effectiveness of Best Management Practices (BMPs) and ideas for improving practices and management strategies.

This bulletin is published monthly by the Storm Water Compliance Review Task Force to support the Caltrans maintenance staff in its efforts to achieve and maintain compliance with storm water pollution prevention regulatory requirements.



Additional information is available in the *Caltrans Maintenance Manual*, Chapter C-6, or from your District Maintenance Storm Water Coordinator. Questions or comments may be directed to Jack Broadbent, Maintenance Storm Water Coordinator, (916) 653-0361